

AMENDMENTS TO THE CLAIMS

Cancel Claims 2 and 3 without prejudice. Please accept amended Claims 1, 4, 6, 9, 12, 14, 15 and 21, and new Claims 25-33 as follows.

Listing of claims.

1. (Currently Amended) A method for exposing a layer with a light comprising:

disposing a mask including a pattern shape of a pixel electrode over the layer formed on a substrate, wherein the substrate includes a data line; and

scanning the mask with the light, such that a direction of the scanning is substantially perpendicular to a longitudinal direction of ~~the pattern shape to form a pattern~~ the data line, wherein the data line was previously formed by a previous scanning in perpendicular to the longitudinal direction.

2-3. (Canceled)

4. (Currently Amended) The method of claim 3 1, further comprising:

forming an insulation layer on the substrate having the data line; and

forming a the pixel electrode as a conductive pattern on the substrate having the insulation layer, ~~wherein a direction of scanning is substantially perpendicular to a longitudinal direction of the data line during an exposure process for forming the pixel electrode.~~

5. (Original) The method of claim 1, wherein the substrate has a size of more than or equal to seventeen inches.

6. (Currently Amended) The method of claim 1, wherein the substrate corresponds to a substrate of a ~~patterned~~ vertical alignment mode liquid crystal display device having a size of nineteen inches.

7. (Original) The method of claim 4, wherein an interval between the data line and a pixel electrode formed on the substrate is at least $6.25\ \mu\text{m}$.

8. (Original) The method of claim 1, wherein one cell is exposed by the mask.

9. (Currently Amended) A method of forming a thin film transistor substrate for a liquid crystal display device comprising:

forming a gate line on the substrate;

forming a data wiring layer on the substrate, wherein the substrate includes the gate line;

forming a photoresist layer on the data wiring layer;

disposing a data line mask including a data line pattern shape over the photoresist layer formed on the substrate;

scanning the data line mask with a light, such that a direction of the scanning is substantially perpendicular to a longitudinal direction of the data line pattern shape of the data line mask to expose the photoresist layer;

patterning the data wiring layer to form a data wiring including a data line;

forming a protection layer on the substrate; and

forming a transparent conductive layer.

10. (Cancelled)

11. (Original) The method of claim 9, wherein an interval between the data line and the pixel electrode on the substrate is at least $6.25\ \mu\text{m}$.

12. (Currently Amended) The method of claim 1, wherein the substrate corresponds to a substrate of a ~~patterned~~ vertical alignment mode liquid crystal display device.

13. (Previously Presented) The method of claim 9, wherein one cell is exposed by the mask and forming the protection layer comprises patterning the protection layer using a second mask simultaneously exposing two cells, wherein the mask is smaller than the second mask.

14. (Currently Amended) A method of manufacturing a thin film transistor substrate for a liquid crystal display device, comprising:

forming a gate wiring layer on a substrate;

etching the gate wiring layer to form a gate wiring that includes a gate line, a gate end and a gate electrode;

forming a gate insulation layer on the substrate having the gate wiring formed thereon;

forming a semiconductor layer, an ohmic contact layer and a conductive layer on the gate insulation layer in sequence;

forming a photosensitive layer pattern by scanning with a light through a data line mask, wherein a direction of scanning is substantially perpendicular to a longitudinal direction of a data line to be formed during an exposure process, and the photosensitive layer pattern includes a first portion, a second portion thicker than the first portion, and a third portion thinner than the first portion;

forming a data wiring including a data line, a data end connected to the data line, a source electrode and a drain electrode, an ohmic contact layer pattern and a semiconductor layer pattern using the photosensitive layer pattern as a mask;

forming a protection layer;

patterning the protection layer and the gate insulation layer to form contact holes, the contact holes respectively exposing the gate end, the data end and the drain electrode;

forming a transparent conductive layer; and

etching the transparent conductive layer to form an auxiliary gate end, an auxiliary data end and a pixel electrode, the auxiliary gate end being connected to the gate end, the auxiliary data end being connected to the data end, the pixel electrode being connected to the drain

electrode.

15. (Currently Amended) The method of claim 14, wherein a the direction of scanning is substantially perpendicular to the longitudinal direction of the data line during an exposure process of a photoresist layer for forming the pixel electrode.

16. (Original) The method of claim 14, wherein an interval between the data line and the pixel electrode on the substrate is at least $6.25\ \mu\text{m}$.

17. (Original) The method of claim 14, wherein one cell is exposed by the mask.

18. (Original) The method of claim 14, wherein a plurality of cells are simultaneously exposed by the mask.

19. (Original) The method of claim 14, wherein the first portion is positioned between the source electrode and the drain electrode, and the second portion is positioned over an upper portion of the data wiring.

20. (Previously Presented) The method of claim 11, wherein the substrate has a size of more than or equal to seventeen inches.

21. (Currently Amended) The method of claim 9, wherein the substrate corresponds to a substrate of a ~~patterned~~ vertical alignment mode liquid crystal display device.

22. (Previously Presented) The method of claim 21, wherein the substrate has a size of more than or equal to seventeen inches.

23. (Previously Presented) The method of claim 9, wherein the substrate has a size of more than or equal to seventeen inches.

24. (Previously Presented) The method of claim 23, wherein an interval between the data line and the pixel electrode on the substrate is at least $6.25\ \mu\text{m}$.

25. (New) The method of claim 9, wherein the direction of the scanning is substantially parallel with a longitudinal direction of the gate line on the substrate to expose the photoresist layer.

26. (New) The method of claim 14, wherein the direction of the scanning is substantially parallel with a longitudinal direction of the gate line on the substrate during the exposure process of the photoresist layer for forming the pixel electrode.

27. (New) A method of forming a thin film transistor substrate for a liquid crystal display device comprising:

forming a data line, wherein forming the data line comprises

disposing a data line mask including a data pattern shape over a data layer formed on a substrate, and

scanning the data line mask with the light, such that a direction of the scanning is substantially perpendicular to a longitudinal direction of the data line pattern shape to form the data line; and

forming a pixel electrode adjacent to the data line.

28. (New) The method of claim 1, further comprising forming an insulation layer between the data line and the pixel electrode, wherein the data line formed on the substrate is electrically coupled with the pixel electrode disposed in a different layer from the data line to generate a coupling capacitance.

29. (New) The method of claim 1, further comprising:
forming an insulation layer on the substrate having the data line; and
forming the pixel electrode as a conductive pattern on the substrate having the insulation layer, wherein a direction of scanning for forming the pixel electrode is substantially perpendicular to a longitudinal direction of the data line.
30. (New) The method of claim 1, wherein the substrate has a size of greater than or equal to about seventeen inches.
31. (New) The method of claim 1, wherein the substrate corresponds to a substrate of a vertical alignment mode liquid crystal display device having a size of about nineteen inches.
32. (New) The method of claim 4, wherein an interval between the data line and a pixel electrode formed on the substrate is at least $6.25\ \mu m$.
33. (New) The method of claim 1, wherein one cell is exposed by the data line mask.